BUILDING TRUST

PRODUCT DATA SHEET

Sikafloor®-263 SL

HIGH PERFORMANCE EPOXY SELF-SMOOTHING BEHAVIOR FOR BOTH SMOOTH AND BROADCASTED FLOORING SYSTEMS .

DESCRIPTION

Sikafloor®-263 SL is a multi-component, self-smoothing, solvent-free epoxy , provides continuous protection for concrete floors in light, medium and heavy duty applications at thickness of between 1.5 and 4mm or greater . The system can be applied successfully at greater thickness but on stages combined with broadcasted aggregates to increase & enhance the mechanical bonding between the layers .

USES

Sikafloor®-263 SL may only be used by experienced professionals.

Sikafloor®-263 SL is used as:
- Self-smoothing and broadcast systems for concrete and cement screeds with normal up to medium heavy wear e.g. storage and assembly halls, maintenance workshops, garages, loading ramps , Warehouses , Car Parks and other traffic decks .
- The broadcast system is recommended for multi-storey and underground car parks, maintenance hangars and for temporary wet process areas, e.g. beverage and food industry .
- Pharmaceutical and other medical or laboratory areas .
- Showrooms , Aircrafts and other demonstration areas .
- Chemicals production filed .
- Oil & Gas plants .

CHARACTERISTICS / ADVANTAGES

- Highly fillable
- Good chemical and mechanical resistance
- Excellent wear & abrasion resistant
- Easy application
- Easy to clean
- Liquid proof
- Gloss finish
- Slip resistant surface possible

SUSTAINABILITY

Conformity with LEED v2009 IEQc 4.2: Low-Emitting Materials - Paints and Coatings

APPROVALS / CERTIFICATES

- Particle emission certificate Sikafloor®-263 SL CSM Statement of Qualification – ISO 14644-1, class 5– Report No. SI 0904-480 and GMP class A, Report No. SI 1008-533.
- Outgassing emission certificate Sikafloor®-263 SL CSM Statement of Qualification – ISO 14644-8, class 6,5 - Report No. SI 0904-480.
- Good biological Resistance in accordance with ISO 846, CSM Report No. 1008-533
- Fire classification in accordance with EN 13501-1, Report-No. 2007-B-0181/14, MPA Dresden, Germany, February 2007.
- Synthetic resin screed material according to EN 13813:2002, Declaration of Performance 02 08 01 02 05 00000002 1008, and provided with the CE marking.
- Coating for surface protection of concrete according to EN 1504-2:2004, Declaration of Performance 02 08 01 02 05 00000002 1008, certified by notified factory production control certification body 0921, certificate of conformity of the factory production control 2017, and provided with the CE marking.
- ISEGA Certificate of Conformity 41583 U16

PRODUCT INFORMATION

Composition	Epoxy		
Packaging	Part A	11.85 kg	
	Part B	3.15 kg	
	Part C (Mixing Ratio 1:1)	15.00 kg	
	Part C (Mixing Ratio 1:1.25)	18.75 kg	
	Full Unit (A+B+C) = 30 Kg (Mix Ratio 1:1) for thickness 1.5 - 3mm . Full Unit (A+B+C) = 33.75 Kg (Mix Ratio 1:1.25) for thickness > 3mm .		
Appearance / Colour	Resin - part A:	coloured, liquid	
	Hardener - part B	transparent, liquid	
	RAL 1001, 6021, 7030, 7032, 7035, 7037, 7038, 7040, 7042, 9002 Other colours on request. Under direct sun light there may be some discolouration and colour variation; this has no influence on the function and performance of the coating.		
Shelf life	12 months from date of production if stored properly in original, unopened and undamaged packing		
Storage conditions	The product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +30°C.		
Density	Part A	~ 1.50 kg/l	(DIN EN ISO 2811-1)
	Part B	~ 1.00 kg/l	
	Mixed resin	~ 1.43 kg/l	
	Filled resin (1:1)	~ 1.84 kg/l	
	Filled resin (1:1.25)	~ 1.90 kg/l	
	All Density values at +23 °C.		

Solid content	~100 % by Weight & by Volume
Volatile organic compound (VOC) content	SCAQMD Method 304-91 VOC Content < 100 g/l

TECHNICAL INFORMATION

Shore D Hardness	~76 (7 days / +23 °C) ~76	(DIN 53 505) (ASTM D 2240)
Abrasion Resistance	~ 35 mg (CS 10/1000/1000) (7 days / +23 °C) ~ 53 mg (CS 10/1000/1000)	(DIN 53 109) (ASTM D4060)
Compressive strength	~ 50 N/mm² ~ 52 N/mm²	(EN196-1) (ASTM C579)
Tensile Strength in Flexure	~ 20 N/mm² ~ 20 N/mm²	(EN 196-1) (ASTM C580)
Tensile strength	~ 23 N/mm²	(ASTM C307)
Tensile Adhesion Strength	> 2 N/mm² (failure in concrete) > 1.5 N/mm² (failure in concrete) (after 28 days at 23°C)	(ISO 4624) (DIN 53 232)
Resistance to Impact	No Cracks	(ASTM D 2794)
Chemical resistance	Resistant to many chemicals. Contact Sika technical service for specific information.	

Temperature resistance

Exposure*	**Dry heat**
Permanent	+50 °C
Short-term max. 7 d	+80 °C
Short-term max. 12 h	+100 °C

Short-term moist/wet heat* up to +80°C where exposure is only occasional (steam cleaning etc.).

*No simultaneous chemical and mechanical exposure and only in combination with Sikafloor® systems as a broadcast system with approx. 3 - 4 mm thickness.

Water absorption	0.77%	(ASTM C413)
Permeability to Water Vapour	W.V.T = 1.2 X 10^{-3} g/h.m^2	(ASTM E 96)

SYSTEMS

Systems

Smooth Finish Application :

Primer	1 X Sikafloor 161 or Sikafloor 94
Putty (Smoothing Layer)	1 or 2 X Sikafloor 92EG mixed with fine filler
Body Layer	1 X Sikafloor 263SL (A+B+C) with the required thickness

Broadcasted , Anti-Slipping Finish Application :

Primer	1 X Sikafloor 161 or Sikafloor 94
Putty (Smoothing Layer)	1 X Sikafloor 92EG mixed with fine filler
Body Layer	1 X Sikafloor 263SL (A+B+C) with the required thickness
Broad Cast	1 X Sikadur Aggregates
Top Coats	1 or 2 X Sikafloor 264 or Sikafloor 92EG

APPLICATION INFORMATION

Consumption

Primer : ~ 0.2 - 0.3 Kg/m^2 (depends on the surface porosity)
Putty : ~ 0.15 - 0.25 Kg/m^2 (depends on the surface quality)
Body Layer up to 3mm thickness : ~ 1.85 Kg/m^2/mm
Body Layer > 3mm thickness : ~ 1.9 Kg/m^2/mm
Broadcasting : ~ 3 - 4 Kg/m^2
Top Coat : ~ 0.25 - 0.35 Kg/m^2

Ambient Air Temperature

+10 °C min. / +30 °C max.

Dew Point

Beware of condensation!
The substrate and uncured floor must be at least 3 °C above dew point to reduce the risk of condensation or blooming on the floor finish.
Note: Low temperatures and high humidity conditions increase the probability of blooming.

Substrate Temperature

+10 °C min. / +30 °C max.

Pot Life

Temperature	Time
+10 °C	~ 50 minutes
+20 °C	~ 25 minutes
+30 °C	~ 15 minutes

Curing Time

Applied product ready for use :

Temperature	Foot Traffic	Light Exposure	Full Curing
+10 °C	~ 72 hours	~ 5 days	~ 10 days
+20 °C	~ 48 hours	~ 3 days	~ 7 days
+30 °C	~ 24 hours	~ 2 days	~ 5 days

Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

Waiting Time / Overcoating

Before applying Sikafloor 263SL over the primer or the putty layer :

Temperature	Minimum	Maximum
+10 °C	24 hours	3 days
+20 °C	12 hours	2 days
+30 °C	8 hours	1 day

Before applying coatings over Sikafloor 263SL :

Temperature	Minimum	Maximum
+10 °C	36 hours	3 days
+20 °C	24 hours	2 days
+30 °C	16 hours	1 day

Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

- Concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum pull off strength of 1.5 N/mm².
- The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.
- Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.
- Weak concrete must be removed and surface defects such as blow holes and voids must be fully exposed.
- Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor®, Sikadur® range of materials.
- All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush or vacuum.

MIXING

Prior to mixing, stir part A mechanically. When all of part B has been added to part A, mix continuously for 3 minutes until a uniform mix has been achieved. When parts A and B have been mixed, add the quartz sand and if required the Extender T and mix for a further 2 minutes until a uniform mix has been achieved. To ensure thorough mixing pour materials into another container and mix again to achieve a consistent mix. Over mixing must be avoided to minimise air entrainment.

Mixing Tools
Sikafloor®-263 SL must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment. For the preparation of mortars use a forced action mixer of rotating pan, paddle or trough type. Free fall mixers should not be used.

APPLICATION

Prior to application, confirm substrate moisture content, relative air humidity and dew point. If > 4 % pbw moisture content, Sikafloor® EpoCem® may be applied as a T.M.B. (temporary moisture barrier) system.
Primer:
Make sure that a continuous, pore free coat covers the substrate. If necessary, apply two priming coats. Apply Sikafloor®- 161 / 94 by brush, roller or squeegee.
Preferred application is by using a squeegee and then backrolling crosswise.

Levelling:
Rough surfaces need to be levelled first using Sikafloor®- 161 / 92EG mixed by fine filler .
Wearing course smooth:
Sikafloor®-263 SL is poured, spread evenly by means of a serrated trowel.
After spreading the material evenly, turn the serrated trowel and smooth the surface in order to achieve an aesthetically higher grade of finish.
Roll immediately in two directions with a spiked roller to ensure even thickness.
Broadcast system:
Sikafloor®-263 SL is poured, spread evenly by means of a serrated trowel.
Then, level and remove any entrapped air with a spiked roller and after about 15 minutes (at +20 °C) but before 30 minutes (at +20 °C), broadcast with quartz sand, at first lightly and then to excess.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with Thinner C immediately after use. Hardened and/or cured material can only be removed mechanically.

MAINTENANCE

To maintain the appearance of the floor after application, Sikafloor®-263 SL must have all spillages removed immediately and must be regularly cleaned using rotary brush, mechanical scrubbers, scrubber dryer, high pressure washer, wash and vacuum techniques etc using suitable detergents and waxes

IMPORTANT CONSIDERATIONS

- Do not apply Sikafloor®-263 SL on substrates with rising moisture.
- Do not blind the primer
- Relative Air Humidity is 80% r.h. max.
- Substrate Moisture Content should be < 4 % pbw moisture content. { Test method: Sika®-Tramex meter, CM-measurement or Oven-dry-method.No rising moisture according to ASTM (Polyethylene-sheet) }.
- Freshly applied Sikafloor®-263 SL should be protected from damp, condensation and water for at least 24 hours.
- For roller / textured coatings: Uneven substrates as well as inclusions of dirt cannot and should not be covered by thin sealer coats. Therefore both substrate and adjacent areas must always be prepared and cleaned thoroughly prior to application.
- The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.

- For exact colour matching, ensure the Sikafloor®-263 SL in each area is applied from the same control batch numbers.
- Under certain conditions, underfloor heating or high ambient temperatures combined with high point loading, may lead to imprints in the resin.
- If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO_2 and H_2O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

DIRECTIVE 2004/42/CE LIMITATION OF EMISSIONS OF VOC

According to the EU-Directive 2004/42, the maximum allowed content of VOC (Product category IIA / j type sb) 500 g/l (Limit 2010) for the ready to use product. The maximum content of Sikafloor®-263 SL is < 500 g/l VOC for the ready to use product.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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